Missouri Department of Natural Resources
"Integrity and excellence in all we do"

Steps to Asset Management Planning

Environmental Assistance Office technical bulletin 6/2004

This paper describes how to get started in asset management in several simple steps.

There are various terms and definitions for the notion of asset management. Some are very complex. At right is a simple one.

> Asset management: A continuous process of acquisition, use and disposal of infrastructure assets to optimize service delivery, and minimize costs over the asset's life
> American Public Works Association

As a system manager considers launching into asset management (AM), it must be decided what level of AM will be targeted. The best level of performance is the deepest level at which the manager can exert reliable control. Programs can begin small but all should have an eye toward constant improvement.

In the ideal world, every piece of valuable infrastructure would be backed by a detailed AM program. That program would spell out how the infrastructure would be selected, designed, built, maintained, upgraded, decommissioned and replaced -- and how all this would be paid for. For most communities, that level of planning is too aggressive.

Most AM programs will begin on a basic level or somewhere between basic and advanced. This paper will provide ideas on how to do basic and intermediate AM planning.

> Visit www.dnr.mo.gov/oac/lgov.htm#asset to learn more about asset management. Consider attending an asset management workshop listed at this Web site location.

Many systems, especially the largest, most complicated and expensive systems, should develop very high level AM programs. However, such complex planning does not lend itself to simple checklists and models, so this paper will not cover that level of planning. System managers and decision makers need to understand the elements of a good AM program in order to properly supervise any consultant hired to develop such a plan and to implement the plan developed by the consultant. Technical bulletins such as this one, and the cited resources, should be reviewed before starting a detailed AM planning process.

The following steps will provide guidance on developing a basic or intermediate AM program. Specific tools mentioned are discussed as examples.

Initial Steps for any AM Planning Process

1. Review and read resources in "Resource Bibliography for Local Governments" www.dnr.mo.gov/oac/pub149.pdf, Asset Management section.
2. Read "Asset Management for Sewer Collection Systems" www.epa.gov/npdes/pubs/assetmanagement.pdf. This guide covers AM concepts and related issues.
3. Read "Asset Management: A Handbook for Small Water Systems" www.epa.gov/safewater/smallsys/pdfs/guide_smallsystems_asset_mgmnt.pdf. This guide provides basic worksheets for accomplishing each part of a basic AM program.
4. Involve stakeholders – ratepayers, decision-makers, managers, staff, etc. – throughout the process. Be sure they understand and accept that AM is a strategically planned and executed long-term approach to utility management.
5. Assign AM to a multi-discipline team. Likely, this will be the system manager and possibly senior operations staff. They will at least receive guidance from the decision making body and whoever handles accounting duties.
6. Ask, and begin answering the "Big5" questions discussed in the asset management workshop slides www.dnr.mo.gov/oac/emiapps.htm, Slide Shows subdirectory.

Additional Steps for Basic AM Planning

7. Complete the worksheets in "Asset Management: A Handbook for Small Water Systems."
8. Track results, satisfy GASB Statement 34 requirements. Reassess AM program and performance every year. Strive to improve every year. Reanalyze and adjust rates every year.

Additional Steps for Intermediate AM Planning

7. Decide how detailed the initial AM plan is to be and if a consultant will be hired to produce part or all of it.
8. Decide upon and write down the mission and objectives for the utility.
9. Decide upon and write down how performance will be measured so it can be verified whether or not stated objectives were achieved.
10. Assuming the system does at least part of the planning, complete the worksheets in "Asset Management: A Handbook for Small Water Systems" up to the "Required Reserve Worksheet." Beyond this point, advanced planning tools are needed.
11. Using much of the data developed for the previous worksheets, complete "Plan2Fund" http://sspa.boisestate.edu/efc/Tools&Services/Plan2Fund/plan2fund.htm. This program will calculate the required annual annuity for capital improvements and it will give system managers a good idea of the overall required rates to fund the program.
12. Using much of the data developed in the previous tools, complete "Show-me Ratemaker" for sewer or water www.dnr.mo.gov/oac/emiapps.htm, from the Sewer or Water subdirectory, as appropriate. Show-me Ratemaker provides an accurate calculation of the rates needed, and it projects needed rates and finances for the next five years.
13. Adopt needed rates this year.
14. Track performance measures and compare to the stated objectives. Satisfy GASB Statement 34 requirements. Reassess AM program and performance every year. Strive to improve every year. Reanalyze and adjust rates every year.

For further assistance

Contact the Missouri Department of Natural Resources' Environmental Assistance Office, Government Assistance Unit at 1-800-361-4827, oac@dnr.mo.gov, or visit the department's Web site at www.dnr.mo.gov/oac/lgov.htm.